

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

The specification is amended to correct a minor grammatical informality.

The claims are amended to address the objection to Claims 3-4. Specifically, the claims clarify that the "p-channel MOSFET" recited in Claims 3 and 4 is different from the "p-channel MOSFET" recited in Claim 1.

Claims 1-5 are pending in this application. Claims 1-3 were rejected under 35 U.S.C. §103(a) as unpatentable over "A Self-Isolated Intelligent IGBT for Driving Ignition Coils", Proceedings of 1998 International Symposium on Power Semiconductor Devices & ICs, Kyoto, to Yoshida et al. (herein "Yoshida") in view of U.S. patent 5,536,958 to Shen et al. (herein "Shen"); Claim 4 was rejected under 35 U.S.C. §103(a) as unpatentable over Yoshida in view of Shen in view of admitted art in the specification at page 18, lines 18-23.

Applicants initially note pending claim 5 has not been addressed in the Office Action.

Applicants and applicants' representative wish to thank Examiner Trinh for the interview granted applicants' representative on October 20, 2004. During the interview the outstanding rejections were discussed in detail. Further, during the interview applicants' representative presented comments as to how the claims were believed to distinguish over the current rejection of Yoshida in view of Shen. The Examiner indicated she would further consider such comments when formally presented in a filed response.

Addressing the above-noted rejections, those rejections are traversed by the present response.

Applicants submit the outstanding rejection is unclear as the basis for the outstanding rejection does not cite any elements in Yoshida as corresponding to the claimed features. It is unclear on what basis Yoshida is even cited. The Office Action indicates Figures 5 and 9 of Yoshida as meeting certain claim limitations, but it is unclear what elements in Yoshida are

being cited to correspond to the claimed features. Applicants respectfully submit there is in fact no correspondence in the teachings in Yoshida with respect to the claimed features.

Specifically, Claim 1 recites a Schottky barrier diode that has an anode connected to an input terminal receiving a drive signal for an IGBT and a cathode connected to an input terminal of a control circuit, and a p-channel MOSFET that shorts both ends of the Schottky barrier diode when the voltage of the drive signal input to the input terminal is higher than a predetermined voltage. Those elements are not believed to be disclosed or suggested in Yoshida.

The primary reference to Yoshida does not appear to disclose the "p-channel MOSFET that shorts both ends of the Schottky barrier diode when the voltage to the drive signal input to the input terminal is higher than a predetermined voltage". Yoshida shows an n-MOS in Fig. 9, but that element is not a p-channel MOSFET, and does not have a function of shorting a Schottky barrier diode.

The outstanding rejection appears to recognize certain deficiencies in Yoshida not disclosing a "Schottky barrier diode". To overcome those deficiencies in Yoshida the outstanding Office Action cites the teachings in Shen. However, the teachings in Shen do not appear related to Yoshida and do not overcome the deficiencies in Yoshida.

The outstanding rejection cites the Schottky diode 28 in Shen. However, applicants note the Schottky diode 28 in Shen does not have an "anode connected to the input terminal" that receives the drive signal for an IGBT. Further, the Schottky diode 28 in Shen does not have a "cathode connected to an input terminal of the control circuit" to drive the IGBT. Thus, no teachings in Shen can overcome the deficiencies in Yoshida.

Stated another way, even if one of ordinary skill in the art were to combine the teachings in Shen with those in Yoshida, the claimed invention would not be realized as the

Application No. 10/689,058
Reply to Office Action of September 22, 2004.

Schottky diode 28 in Shen does not have the same connection structure as the claimed
"Schottky barrier diode".

In such ways, applicants respectfully submit the claims as currently written clearly
distinguish over Yoshida in view of Shen.

As no other issues are pending in this application, it is respectfully submitted that the
present application is now in condition for allowance, and it is hereby respectfully requested
that this case be passed to issue.

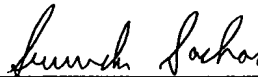
Respectfully submitted,

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